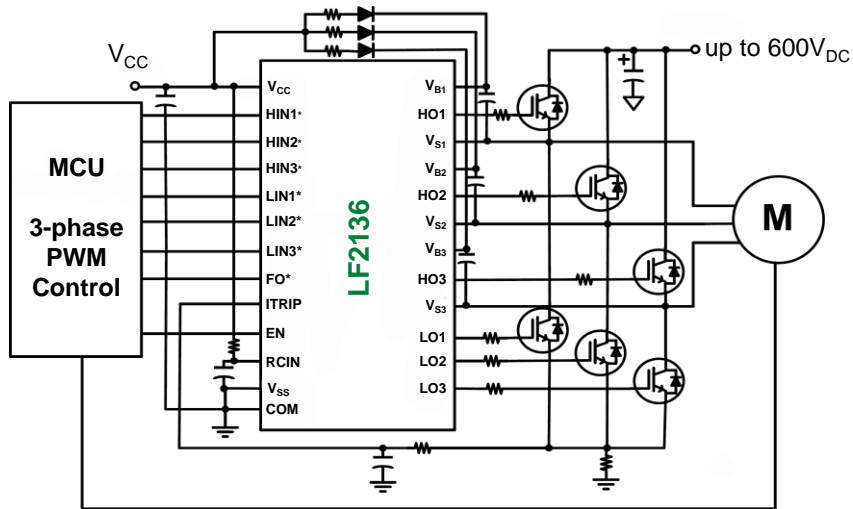


3-Phase Half-Bridge Gate Drivers (LF2136 and LF2388)

Problem/Solution

One challenge in power management applications is switching power MOSFETs or IGBTs efficiently.

The LF2136 and LF2388 devices are 3-phase gate drivers that efficiently switch three pairs of N-Channel MOSFETs or IGBTs in 6-pack configurations. The gate drivers convert the controller's PWM signals into gate-signals compatible to MOSFETs or IGBTs, providing a robust and reliable power semiconductor control.



Technical Resources:



Series Page



LF2136 Datasheet



LF2388 Datasheet



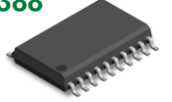
Cross Reference



Benefits

- Driven from a single power supply
- Can be combined with a wide range of power devices
- Simplified start-up and protection schemes
- Shoot-Through Protection by hardware
- More precise control and lower torque ripple

LF2388



LF2136



Features

- Three floating high-side drivers in bootstrap operation to 600V
- 350mA/200mA and 600mA/290mA Sink/Source Output Capability
- Undervoltage Lockout and Overcurrent Protection
- Internal deadtime generation
- Matched propagation delay for all channels

Markets/Applications

- 3-Phase Motor Drives
- White Goods
- Air Conditioners
- Cordless Power Tools
- Robotics

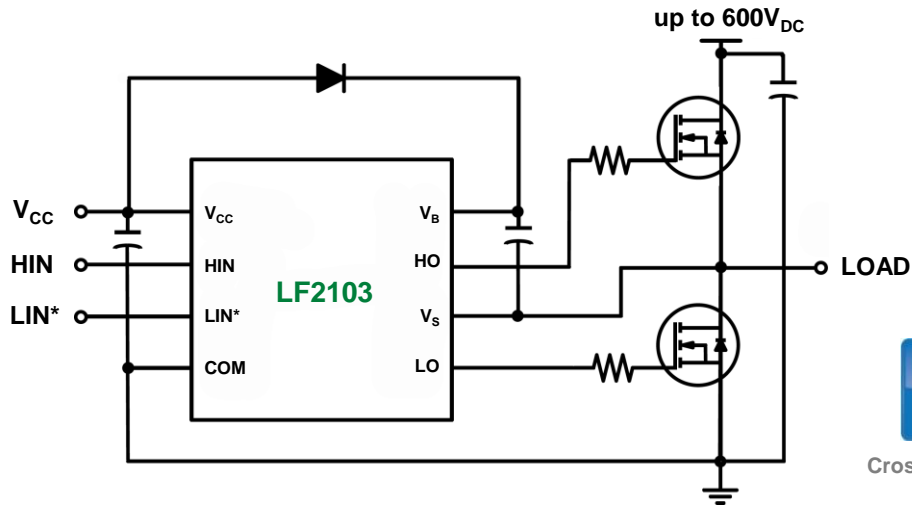


Half-Bridge Gate Drivers (LF2103, LF2104, LF2304, LF2184, LF21844)

Problem/Solution

High voltage, high speed half-bridge gate drivers are efficiently driving two N-Channel MOSFETs or IGBTs. The floating high-side switch is operated in bootstrap configuration up to $600V_{DC}$.

The logic inputs are compatible to standard TTL and CMOS levels down to 3.3V. The gate drivers convert the controller's PWM signals into gate-signals compatible to MOSFETs or IGBTs, providing a robust and reliable power semiconductor control.



Cross Reference

Technical Resources:



Series
Page



LF2103
Datasheet



LF2104
Datasheet



LF2304
Datasheet



LF2184
Datasheet



LF21844
Datasheet

Benefits

- Driven from a single power supply
- Can be combined with a wide range of power devices
- Simplified start-up and protection schemes
- Shoot-Through Protection by hardware
- More precise control and lower torque ripple

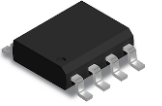
Features

- Floating high-side driver in bootstrap operation to 600V
- 600mA/290mA and 2300mA/1900mA sink/source Output Capability
- Undervoltage Lockout and Overcurrent Protection
- Internal deadtime generation
- Matched propagation delay for all channels

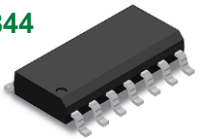
Markets/Applications

- Motor Controls / Drives
- Stepper Motor Drives
- DC/DC-Converters
- AC/DC-Inverters
- Robotics
- Cordless Power Tools
- Drones

LF2103
LF2104
LF2304
LF2184



LF21844



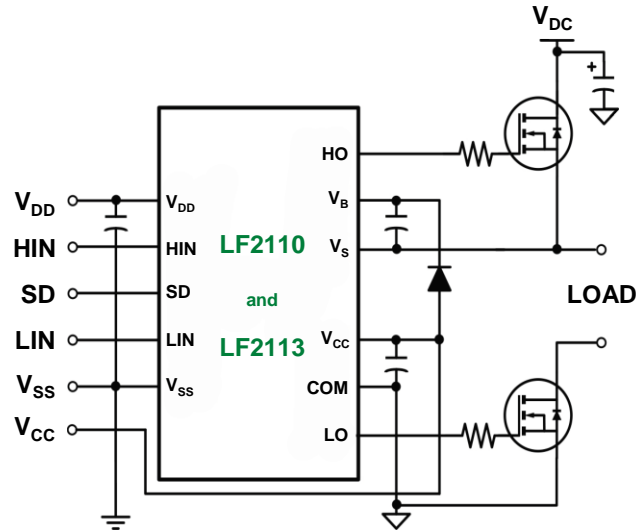
High-Side / Low-Side Gate Drivers

(LF2106, LF2181, LF2190, LF21064, LF21814, LF21904, LF2110, LF2113)

Problem/Solution

High voltage, high speed High-Side and Low-Side Gate Drivers are efficiently driving two N-Channel MOSFETs or IGBTs. The floating high-side switch is operated in bootstrap configuration up to 600V_{DC}.

The logic inputs are compatible to standard TTL and CMOS levels down to 3.3V. The gate drivers convert the controller's PWM signals into gate-signals compatible to MOSFETs or IGBTs, providing a robust and reliable power semiconductor control.



Cross Reference



LF21814 Datasheet



LF21904 Datasheet



LF2110 Datasheet



LF2113 Datasheet



Series Page



LF2106 Datasheet



LF2181 Datasheet



LF2190 Datasheet



LF21064 Datasheet

Benefits

- Driven from a single power supply
- Can be combined with a wide range of power devices
- Simplified start-up and protection schemes
- Shoot-Through Protection by hardware
- More precise control and lower torque ripple

Features

- Floating high-side driver in bootstrap operation to 600V
- 600mA/290mA to 4.5A/4.5A product range Sink/Source Output Capability
- Undervoltage Lockout and Overcurrent Protection
- Internal deadtime
- Matched propagation delay

Markets/Applications

- Servo Motor Control
- UPS
- Welding
- Pumps and Fans
- Induction Cooking

LF2101
LF2106
LF2181
LF2190



LF21064
LF21814
LF21904



LF2110
LF2113

